Amendments to the Specification:

Please replace paragraph [0023] with the following amended paragraph:

[0023] Each of the flip-flops has metastability detectors (275,280,285,290,295), which are circuits that describe whether the signal on their input is metastable. In order to generate metastability, the flip-flops can be clocked with an input that deliberately violates the setup or hold times (and possibly both) of the flip-flop to ensure meta-stable behavior. The metastable output will cause the flip-flop to be asynchronous when compared with the clock input. A well-known synchronizing circuit can be used to synchronize the meta-stable output of the flip-flop with the clock source. After this synchronization, the flip-flop output is compared by the metastability detector to an input wave to ascertain whether the input and the output of the flip-flop do not match, indicating that the flip flop is in a metastable state. U.S. patent application serial number 09/519,549, Philips disclosure 700720-filed Mar. 6, 2000, now issued U.S. Pat. No. 6,631,390, is hereby incorporated by reference as background material regarding the provision of background information about the function of the metastability detectors.